SUPER|CIRCUITS

LCD Monitor
User Manual

Products: LCD17-5, LCD19-5, LCD19W-7, LCD22W-7

Please read this manual before using your monitor, and always follow instructions
for proper use. Please save this manual for future reference.

⚠️ **WARNING**

This monitor is equipped with a power plug with ground. Use only with a grounded electrical outlet. Always follow the instructions in the installation guide when applying power. Fire and equipment damage can occur if power is applied incorrectly.

CAUTION

Operate this monitor only in environments where the temperature and humidity is within the recommended range. Operation outside the recommended range may cause electric shock and shorten the life of the product.

CAUTION

The slots on the back of the monitor are provided for ventilation. Do not cover these slots or obstruct the airflow around or through the enclosure.

CAUTION

Do not place the monitor in locations where liquids can be splashed on it.
Avoid touching or scratching the LCD screen.

CAUTION

Disconnect the power cord and all other cables from this monitor if the following conditions exist:
- The power cord is frayed or damaged
- The machine has been dropped or the enclosure is damaged
- When the monitor doesn't function normally
- If liquid has been spilled into the interior of monitor

Refer repair to qualified service personnel.

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Table of Contents

SECTION 1
Introduction

This video monitor has a rugged metal construction and displays sharp and brilliant video by utilizing an active TFT LCD matrix. The high contrast ratio generates sharp, crisp lines and images. Also, the fast response time gives superior clarity for moving images, eliminating "ghosting". Key features include:

- Built-in BNC, RCA, HDMI, S-Video and VGA inputs
- Built-in audio speakers
- High resolution: 1680 x 1050 (LCD22W-7), 1440 x 900 (LCD19W-7), 1280 x 1024 (LCD19-5 and LCD17-5) pixel display
- Remote control

1.1　What's in the box

Your monitor includes the following:

- LCD monitor and base
- User manual (this document)
- Power cord
- 6' VGA cable
- Audio cable with stereo mini-jack connectors
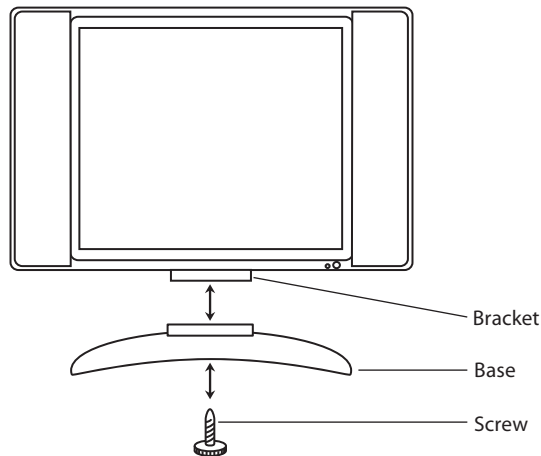- Remote control

SECTION 2
Installation and Setup

To install the monitor:

1.   Remove the components from the packaging and inspect them for damage. If the monitor is damaged in any way, return it to your supplier for replacement.

2.   Find the monitor assembly and base. Use the screw provided to attach the base to the monitor support bracket. The screw may be attached to the underside of the monitor support bracket or in the base.
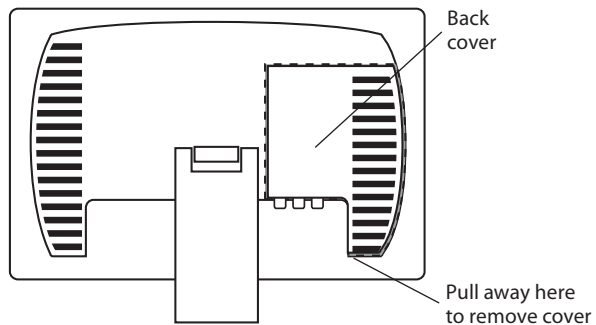

Bracket

Base

Screw

3.   Connect your video source to the monitor input that provides the best video quality. This monitor connects directly to five types of video interfaces: HDMI, VGA, S-Video, composite video (RCA), and BNC. The HDMI, VGA, S-video, and composite video connectors are located on the lower back side of the monitor.

Inputs on the lower back side of monitor

BNC connectors are located on the back left side of the monitor underneath the back cover. Remove the cover by carefully pulling the lower edge of the cover away from the monitor.

Back cover

Pull away here to remove cover

Monitor back cover

Removing the cover opens access to the BNC input and output connectors and their associated audio jacks.

Inputs on the back left side of the monitor

4. If necessary, configure the video source (DVR, PC, etc) to enable video (and audio) to the video output you are using.

5. Connect the audio output from the video source to the audio connector(s) associated with the monitor video input port you are using.

6. If needed, connect the monitor video output (BNC) and audio output (RCA) to a video input device. (See photo above.)

7. Connect the power cable to the monitor , then plug it into a grounded power outlet.

8. Press the **POWER** button to power on the monitor. The **POWER** button is located in the control panel on the right side of the monitor.

SOURCE

Move up in menu
Move down in menu
Move right in menu
or volume up
Move left in menu
or volume down

MENU (open/close)
Power

Audio output
(on some models,
on the left side)

Control panel

9.   Configure the monitor for the video input source you are using. Refer to **Section 3: Basic Operation** for more information.
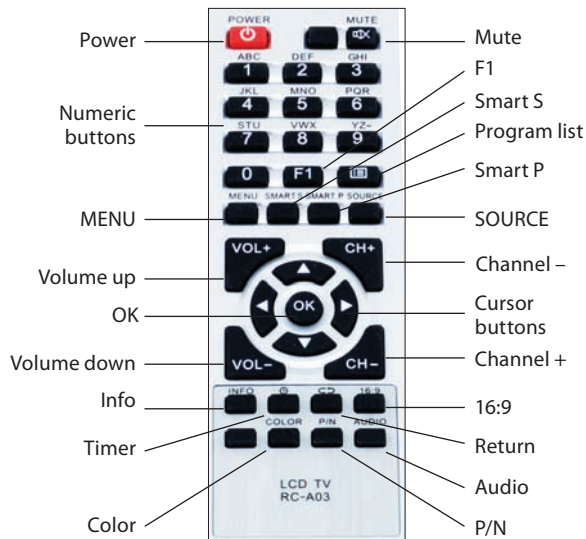
SECTION 3

Basic Operation

3.1 Using the remote control

Monitor functions that can be performed on the control panel can also be done with the remote control. The buttons on the remote control are described below.

> **NOTE** *The function of buttons on the remote control depend on the display source selected. For instance, if the video input source selected is PC, the monitor will ignore the numeric buttons and other buttons unrelated to that input source.*

Table 1.   Remote control button functions

Button	Function
Power	Turn on or standby
Info	Display system information
Mute	Silence audio
Timer	Time setting button

Button	Function
Numeric buttons (0 – 9)	Enter number buttons
Program list	Scan or set program list
F1	Not used.
Cursor	Up or down cursor button: function select; left or right cursor button: add or reduce
OK	Confirm selection
CH +/−	Add or delete channel number
VOL +/−	Sound volume up (**+**) or down (**−**) buttons
Menu	Display menu
Source	Display source selection menu
SMART S	Intelligent sound mode selection
SMART P	Intelligent video mode selection. Select from PERSONAL, SOFT, ADVANCED, or STANDARD preset video image adjustments
Return	Return to previous channel
Smart image	Intelligent image mode select
16:9	Switch between Full, ZOOM, ZOOM2, NORMAL, or PANORAMA
info	Return to previous channel
Timer	Set sleep timer to 15, 30, 45, or 60 minutes
Color	Select color tone: NORMAL, WARM, COOL
P/N	Not used

3.2   Power

3.2.1   Power On

The monitor can be powered on in two ways:

· Press the ⏻ button on the on the monitor control panel.
· Press the **Power** button on the remote control.
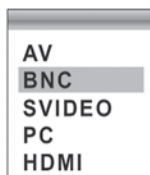
3.2.2   Standby mode

When the monitor is not in use, press the **Power** button on the remote control to put the monitor in standby mode. When the monitor is in standby, the front panel power LED is red.

NOTE   *The monitor will change to standby mode if it is powered on and there is no signal input for 5 minutes, or when the preset time to turn off is reached.*

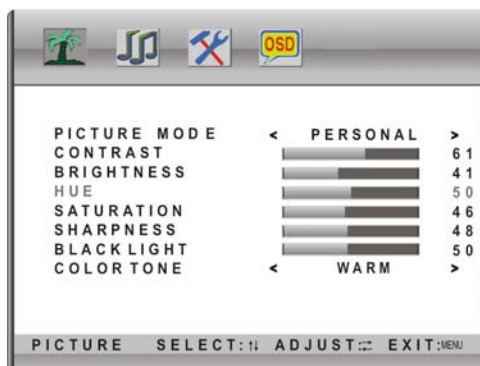## 3.3   Selecting an input source

Press **SOURCE** on either the remote control or the monitor to open the INPUT SOURCE pop-up window.

```
AV
BNC
SVIDEO
PC
HDMI
```

Then press the up, ▲, or down, ▼, cursor keys on remote control or on the monitor to select the video input interface. Input interfaces are AV (RCA, composite video input), BNC, S-VIDEO, PC (VGA input), and HDMI. Press the **OK** button on the remote control or **MENU** button on the control panel to switch to the highlighted video input. An on-screen confirmation will appear.

3.4   Working with on-screen menus

Press **MENU** on the remote control or on the monitor control panel to open the monitor configuration menus. Initially, the monitor displays the PICTURE menu screen. Options listed on the menu screens may differ from those shown herein depending on the selected video source.

```
PICTURE MODE    <    PERSONAL    >
CONTRAST                          61
BRIGHTNESS                        41
HUE                               50
SATURATION                        46
SHARPNESS                         48
BLACK LIGHT                       50
COLOR TONE      <    WARM         >

PICTURE    SELECT:↕ ADJUST:⇄ EXIT:MENU
```

PICTURE menu

1.   Press the left, ◀, or right, ▶, cursor keys on the remote control, or the **+** or **−** buttons on the monitor control panel to select one of four menu screens: **PICTURE**, **SOUND**, **ADVANCED**, or **SYSTEM**.

2.   Press the down, ▼, cursor keys on the remote control or the **−** button on the monitor control panel to change settings on the menu screen you selected, press **MENU** again to close the menu screen.

3.4.1   PICTURE menu

Use the PICTURE menu to adjust the image contrast, brightness, and other attributes of the image displayed on the screen. One of four modes can be selected: PERSONAL, which allows you to set image attributes individually, and SOFT, DYNAMIC and STANDARD, which provide factory preset attributes levels. Additionally, in each of the four modes the attribute COLOR TONE can be set to COOL, NORMAL or WARM color temperatures.

To adjust the image attributes, do the following:

1.   Press **MENU** on the remote control or on the monitor control panel. The monitor will display the PICTURE menu screen.

2.   Press the down, ▼, cursor key on the remote control or monitor to select PICTURE MODE options. When an option is selected, it is highlighted.

3.   With PICTURE MODE selected, press the left, ◀, or right, ▶, cursor keys on the remote control, or the **+** or **−** buttons on the monitor control panel to select one of four picture modes: PERSONAL, STANDARD, DYNAMIC, or SOFT. As you step through the preset menus, the picture changes to reflect the attribute set by the mode selected. Choose the picture mode that best satisfies your needs.

  —   If you select STANDARD, DYNAMIC, or SOFT, you can change only the COLOR TONE option.
  —   If you select PERSONAL, you can set the CONTRAST, BRIGHTNESS, HUE, SATURATION, SHARPNESS, BLACKLIGHT, and COLOR TONE individually.

NOTE   *On systems displaying NTSC video, the HUE option is not available.*

4.   Press the up, ▲, or down, ▼, cursor keys on the remote control or on the monitor control panel to select the attribute you want to adjust. After selecting the attribute, use the left, ◀, or right, ▶, cursor keys on the remote control or the **+** or **−** buttons on the monitor control panel to change the setting of the attribute. Repeat this step for the other attribute(s) you want to change.

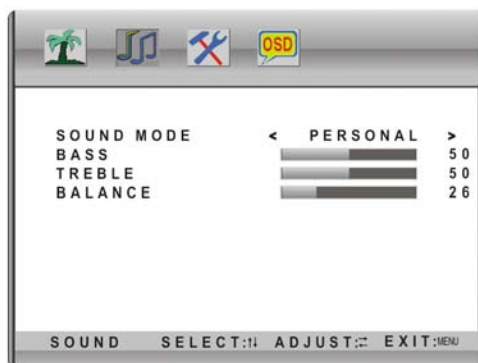5.   Press **MENU** again to save your settings and exit menu mode.

Table 2.   PICTURE menu option summary

Option	Function	Description
PICTURE MODE	Select picture mode	STANDARD, DYNAMIC, SOFT, or PERSONAL
CONTRAST	Adjust the image contrast	Increasing the value increases contrast; decreasing the value decreases contrast (0-100)
BRIGHTNESS	Adjust brightness and blackness the image	Increasing the value increases brightness; decreasing the value decreases brightness (0-100)
HUE	Adjust the hue of the image	Increasing the value increases green; decreasing the value increases purple (0-100)
SATURATION	Adjust the color saturation of the image	Increasing the value increases color saturation; decreasing the value decreases color saturation (0-100)
SHARPNESS	Adjust the sharpness of the image	Increasing the value increases definition; decreasing the value decreases definition (0-100)
BLACKLIGHT	Adjust the black light of the image	Increasing the value increases black light; decreasing the value decreases black light (0-100)
COLOR TONE	Adjust the color tone of the image	NORMAL, WARM, COOL color temperatures

3.4.2   SOUND menu

Use the SOUND menu to adjust the audio bass, treble, and balance. One of four sound modes can be selected: PERSONAL mode, which allows you to set bass, treble and balance, and STANDARD, NEWS, and MUSIC modes that have fixed levels for bass and treble, but allow you to set the balance.

Volume is not adjusted within a menu. Use the **VOL+** and **VOL–** buttons on the remote control and the **+** and **–** buttons on the monitor control panel to adjust the volume level.

SOUND menu

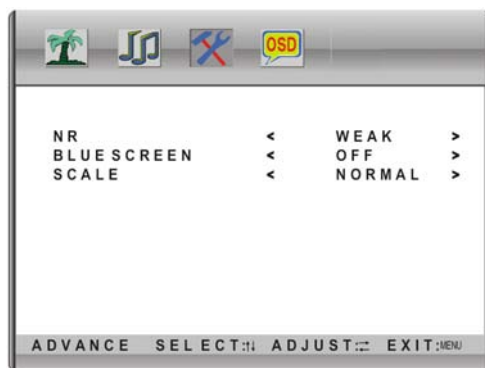To modify the sound parameters, do the following:

1. Press **MENU** on the remote control or on the monitor control panel. The monitor will display the PICTURE menu screen.

2. Press the right, ▶, cursor key on the remote control or the **+** button on the monitor once to open the SOUND menu.

3. Press the down, ▼, cursor key on the remote control or the monitor to select the SOUND MODE. When an option is selected, it is highlighted.

4. With SOUND MODE selected, press the left, ◀, or right, ▶, cursor keys on the remote control or the **+** or **−** buttons on the monitor to select one of four sound modes, PERSONAL, MUSIC, NEWS, or STANDARD. As you step through the preset menus the sound tonal quality and balance change to reflect the mode settings. Choose the sound mode that best satisfies your needs.

5. Press up, ▲, or down, ▼, cursor keys or the remote control or the monitor control panel to select a sound attribute you want to adjust. After selecting the attribute, use the left, ◀, or right, ▶, cursor keys on the remote control or the **+** or **−** buttons on the monitor control panel to change the setting of the attribute. Repeat this step for other options you want to change.

6. Press the **MENU** button again to save your settings and exit the menu mode.

Table 3.   SOUND menu option summary

Option	Function	Description
SOUND MODE	Select audio sound affect mode	PERSONAL, STANDARD, NEWS, or MUSIC modes
BASS	Adjust bass level	Increasing value increases bass; decreasing value decreases bass (0-100)
TREBLE	Adjust treble level	Increasing value increases treble; decreasing value decreases treble (0-100)
BALANCE	Adjust the balance between left and right channel volume.	Increasing value decreases left volume; decreasing value decreases right volume (0-100)

3.4.3   ADVANCE menu

Use the ADVANCE menu to set noise reduction (NR) level, screen background, and zoom/aspect ratio. This menu is not available when the input source is PC (VGA) or HDMI.

ADVANCE menu

To adjust the ADVANCE parameters, do the following:

1. Press **MENU** on the remote control or on the monitor control panel. The monitor will display the PICTURE menu screen.

2. Press the right, ▶, cursor key on the remote control or the **+** button on the monitor twice to open the ADVANCE menu.

3. Press the down, ▼, cursor key on the remote control or the monitor control panel to select the NR option. When an option is selected, it is highlighted.

4. With NR selected, press the left, ◀, or right, ▶, cursor keys on the remote control or the **+** or **−** buttons on the monitor to select either WEAK, STRONG, or OFF. As you step through different levels the display changes to reflect the NR level selected.

5. Press the up, ▲, or down, ▼, cursor keys or the remote control or the monitor control panel to select another option. After selecting the option, use the left, ◀, or right, ▶, cursor keys on the remote control or the **+** or **−** buttons on the monitor control panel to change the setting. Repeat this step for other settings you want to change.

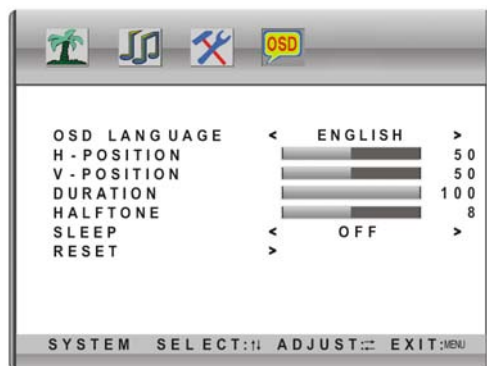6. Press **MENU** again to save your settings and exit the menu mode.

Table 4.   ADVANCE menu option summary

Option	Function	Description
NR	Adjust noise reduction	WEAK, MIDDLE, STRONG, or OFF modes
BLUE SCREEN	Set "no signal" / background screen to blue or black	Blue ON or OFF
SCALE	Adjust the picture scale and aspect ratio	FULL, ZOOM, ZOOM2, NORMAL, or PANORAMA (not used with all input sources)

3.4.4   SYSTEM menu

Use the SYSTEM menu to setup the attributes of the menu display and to reset the monitor settings to the factory default values.

SYSTEM menu

To adjust the SYSTEM parameters, do the following:

1. Press **MENU** on the remote control or on the monitor. The monitor will display the PICTURE menu screen.

2. Press the left, ◀, cursor key on the remote control or the − button on the monitor control panel to open the SYSTEM menu.

3. Press the down, ▼, cursor key on the remote control or the monitor to select the OSD LANGUAGE option. When an option is selected it is highlighted.

4. With OSD LANGUAGE selected, press the left, ◀, or right, ▶ cursor keys on the remote control or the + or − buttons on the monitor control panel to select one of several menu languages. As you click through the different languages, the menu language changes to reflect the selection.

5. Press up, ▲, or down, ▼, cursor keys on the remote control or on the monitor to select another option. After selecting the option, use the left, ◀, or right, ▶, cursor keys on the remote control or the + or − buttons on the monitor to change the setting. Repeat this step for other options you want to change.

6. Press **MENU** again to save your settings and exit the menu mode.

Table 5.   SYSTEM menu option summary

Option	Function	Description
OSD LANGUAGE	Select menu language	Select menu language – English, French, Chinese, Turkish, etc.
H-POSITION	Adjust horizontal position of menu display	Increasing value, menu moves right; decreasing value, menu moves left (0-100)
V-POSITION	Adjust vertical position of menu display	Increasing value, menu move down; decreasing value, menu move up (0-100)
DURATION	Set duration of menu	Increasing the value lengthens the duration of menu display (0 – 100)
HALFTONE	Adjust screen halftone level	Increasing value increases halftone; decreasing value decreases halftone (0-8)
SLEEP	Set sleep timer	Options are OFF, 15, 30, 45, 60 (minutes)
RESET	Reset menu settings to factory default	

SECTION 4
Specifications

Table 6.   Video interface specifications*

Interface	Specification
HDMI (optional)	Video signal: 1080p, 1080i, 720p, 576p, 576i, 480p, 480i Audio: LPCM 48KHz, 44.1KHz, 32KHz, 24-bit, 20-bit, 16-bit
VGA	DB-15, 75 Ω, 0.5 ~ 0.7 Vp-p, H.V: TTL level (support mode, refer to VGA input mode)
S-Video Input	Y: 75Ω 1 Vp-p, C: 75Ω 0.286 Vp-p
BNC/CVBS Input/Output	Y: 75Ω, 1 Vp-p
Audio Input/Output	20 KΩ, 0.5 Vp-p
Earphone	16 ~ 300 Ω, 100 mW + 100 mW

Table 7.   PC (VGA) input resolutions: LCD17-5, LCD19-5 monitors*

Mode	Resolution	Refresh (Hz)
VGA	720 × 400	70
VGA	640 × 480	60
SVGA	800 × 600	60
XGA	1024 × 768	60
XGA	1280 × 960	60
XGA	1152 × 864	75
SXGA	1280 × 1024	60**

Table 8.   PC (VGA) input resolutions: LCD19W-7 monitor*

Mode	Resolution	Refresh (Hz)
VGA	720 × 400	70
VGA	640 × 480	60
SVGA	800 × 600	60
XGA	1024 × 768	60
WXGA	1280 × 768	60
WXGA	1440 × 900	60**

Table 9.   PC (VGA) input resolutions: LCD22W-7 monitor*

Mode	Resolution	Refresh (Hz)
VGA	720 × 400	70
	640 × 480	60
SVGA	800 × 600	56, 60
XGA	1024 × 768	60
	1280 × 960	60
SXGA	1280 × 1024	60
	1680 × 1050	60**

Table 10.   General specifications*

Item	LCD17-5	LCD19-5	LCD19W-7	LCD22W-7
Resolution (maximum)	1280 x 1024 @ 60 Hz		1440 x 900 @ 60 Hz	1680 x 1050 @ 60 Hz
Pixel pitch	0.264 x 0.264 mm	0.294 x 0.294 mm	0.2835 x 0.2835 mm, or 0.285 x 0.285 mm	0.282 x 0.282 mm
Active area	13.30 x 10.64 in (337.92 x 270.34 mm)	14.82 x 11.85 in (376.32 x 301.06 mm)	16.07 x 10.05 in (408.24 x 255.15 mm) or 16.16 x 10.10 in (410.4 x 256.5 mm)	18.65 x 11.66 in (473.76 x 296.10 mm)
Colors	16.7 M			
Surface	Anti-glare			
Audio volume	3 W + 3 W			
Air pressure	86 kPa ~ 104 kPa			
Temperature (operating)	41°F ~ 104°F (5°C ~ 40°C)			
Temperature (storage)	-4°F ~ 131°F (-20°C ~ 55°C)			
Humidity (operating)	10% ~ 85%			
Humidity (storage)	5% ~ 95%			
Power consumption***	40 W (on), < 2 W (standby)	< 45 W (on), < 2 W (standby)		
Size (L x W x H)	19.5 x 5.4 x 2.4 in (496 x 390 x 62 mm)	20.1 x 16.9 x 2.76 in (510 x 430 x 70 mm)	20.47 x 14.84 x 2.99 in (520 x 377 x 76 mm)	23.11 x 16.34 x 3.03 in (587 x 415 x 77 mm)
Net Weight	13.23 lbs (6.0 Kg)	15.43 lbs (7.0 Kg)	14.33 lbs (6.5Kg)	15.43 lbs (7.0 Kg)
Gross Weight	16.54 lbs (7.5 Kg)	19.84 lbs (9.0 Kg)	17.64 lbs (8.0 Kg)	19.84 lbs (9.0 Kg)
Remote control range	< 26.2 ft (< 8 m) ± 30°			

* These specifications are subject to change without notice.
**Recommended mode
*** Power supply complies with EPA standards and is compatible with the VESADPMS standard.

SECTION 5
Troubleshooting

Q   My monitor has no image or sound. How can I fix this problem?

A   It may be that the power source is bad, or the power connections are loose. Check the power cord to make sure it is connected. Also, try to power on the monitor using both the button on the monitor and the button on the remote control.

Q   The monitor display is black and white (no color). Why?

A   The color saturation setting of the monitor may be too low. Use the PICTURE menu to increase the saturation level setting.

Q   I have a picture on the monitor but no sound. Is there an adjustment?

A   Yes, the volume setting may be too low. Also, check the connections from the audio source to the monitor.

Q   With a computer connected to the monitor, there is no display. Additionally, the LED is blinking. Why?

A   The cable from between the computer and the monitor may be loose or bad. Check the cable connections, or replace the cable.

Q   Why does the remote control only work when it is close to the monitor?

A   The receiver sensor on the front of the monitor may be covered or the batteries in the remote control may be weak. Ensure that the IR receiver on the monitor is clean and not blocked. Also, replace the batteries in the remote control with new ones.

Q   When I use the monitor with my computer why is the display faint?

A   The display settings of the monitor may be incorrect or the display mode is incorrect. Use the auto-adjustment function in the menu. Set the monitor to the optimal display setting.

Q   Why is the display small when I use the monitor with my computer?

A   The monitor configuration menu settings are incorrect. Open the SYSTEM menu and use the auto adjustment function. Set the monitor to the optimal display setting.

Q   My monitor makes noise when I turn it off. Is this normal?

A   Yes. This is usually caused by an electrical release in the monitor circuitry.

Q   The image on my monitor is poor and unstable. What causes this to happen?

A   Room lighting, static electricity, and other external factors can disturb the image or cause it to be unstable. Try shutting off the monitor and disconnecting it from its power source for two minutes. Then reconnect it and power it on again.

⚠
CAUTION
Don't let your monitor display the same pattern continuously. If a high contrast picture remains on the screen for a long time, the image may "burn" into the display, which usually dissipates after the monitor is shut off. In extreme conditions, a remnant of the prior image may remain on the display.